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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,172	11/25/2000	Kia Silverbrook	NPS022US	3860
24011	7590	06/29/2005	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			ABDULSELAM, ABBAS I	
			ART UNIT	PAPER NUMBER
			2677	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/722,172	Applicant(s) SILVERBROOK ET AL.	
	Examiner Abbas I. Abdulsalam	Art Unit 2674 7	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/10/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/10/05 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 3-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (USPN 6152370) in view of Ehrhart et al. (USPN 6304660), and Yukihiro et al. (Japanese publication # 09-022439).

Regarding claim 1, Ackley teaches as shown in Fig. 1, a data collection symbology reader (50) including a light source (52), a sensor (54), a receiver or converter (56), processor and (60) and memory (57). See Fig. 1 Ackley discloses that the reader (50) is constructed to read and decode a bar code symbol (53) or "data collection symbols" formed as relief pattern on surfaces (col. 6, lines 1-3). Ackley defines "data collection symbols" to mean a symbol from any linear, stacked, area and other machine-readable symbology (col. 5, lines 34-39). Ackley indicates that all elements in a given profile can be identified and subsequently decoded. See col. 3, lines 47-67 and col. 1-3. Ackley teaches that a processor (60) identifies portions of a large shape signal (received from a receiver) corresponding to resolved shapes and spaces, generates an unresolved element matrix in response to the large shape signal, and produces a signal indicative of the information encoded based on the unresolved element matrix. See col. 4, lines 39-45 Referring to Fig. 3, Ackley shows that the sensor (54) having an imaging lens (221) and an array of photo- detectors (222) producing a signal analogous to a reflectance profile (Fig. 4B). Ackley defines a profile to mean analog signal corresponding to a spatial representation of bars and spaces in a relief formed symbol. See col. 6, lines 37-59. In addition, Ackley's symbology reader (50) includes a sensor (54), which can be one or two-dimensional CCD, semiconductor array, vidicon or other area imager. See col. 5, lines 53-55.

However, Ackley does not teach generation of "region data indicative of the identity of the region using the coded data".

Ehrhart on the other hand teaches an apparatus including a material detection imaging assembly, which may detect material on a document by detecting transmissivity characteristics, or by sensing radiation emission characteristics of the document. Ehrhart teaches a controller of

the apparatus that is in communication with a lookup table correlates ticket identification codes with indicators. For example, referring to Fig. 3.1, Ehrhart teaches a system (302) is adapted to capture images that can be processed to determine the regions in a play area of a game ticket in which scratch-off material has been removed (col. 9, lines 48-51). Ehrhart discloses a system (330) including scratch of material (331) of a game ticket (202-3-4) that is provided with an additive that emits radiant energy in a second band of wavelength when radiated by radiant energy in a first band of wavelengths. Ehrhart illustrates that the system (330) is controlled by a processor-based control unit which controls a 1.times.N pixel array image sensor, and captures image data from image signals generated by sensor (334). Ehrhart adds that the controller also controls a transport mechanism for transporting a document across a field of view of sensor so that controller can construct 2D images from 1D "slice" image signals generated by sensor (334). Such a See Fig. 3-4, Fig. 3-5 and col. 11, lines 13-50.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ackley's symbology reader system (50) to adapt Ehrhart's detection system (Fig 3.4) including the use of a sensor (334) and a surface (202-3-4) as configured in the Figure. The use of a sensor (334) helps optically read lottery game tickets as taught by Ehrhart.

However, Ackley does not teach, "an attachment arrangement adapted to facilitate attachment and detachment of the device to and from a writing implement having a nib, the sensing device being adapted to sense coded data at least when the nip is in contact with the surface, the nib being adapted to mark the surface". Yukihiro on the other hand teaches a data

symbol reader with a casing (2) having a head part (22) which itself has a casing (3) whose tip part is attached with a cover body (9) in a removable way. See the abstract and drawing 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ackley's symbology reader system (50) to adapt Yukihiro's removable covering at the tip as configured in drawing 1. Because both Ackley and Yukihiro teach about sensing devices and one of ordinary skill in the art would have looked toward Yukihiro for the manner by which the sensing device is implemented.

Regarding claims 3, Yukihiro teaches the use of a cover body (9) as shown in drawing 1, and one of ordinary skill in the art would have ascertained that the covering could be of any desired design.

Regarding claims 4-5 and 7-8, see Yukihiro's drawing 1.

Regarding claims 13 and 15, Ackley teaches the use of data collection or bar symbol (53), which refers to a symbol from any linear, stacked, area and other machine-readable symbology. See col. 5, lines 34-46. It would have been obvious that "machine readable symbology" is a phrase wide enough to include tags as coded data.

Regarding claim 14, Ehrhart teaches a sensor (334), and a controller of the apparatus that is in communication with a lookup table correlates ticket identification codes with indicators. (see abstract)

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in view of Ehrhart et al, Yukihiro and in further view of Wilson et al. (USPN 5434370).

Regarding claim, 6, Ackley as modified does not teach a calibrator “for calibrating the device such that the information indicative of the distance between a writing portion of the writing implement and the detector is incorporated in the region identity.” Wilson on the other hand teaches calibration strips (22a, 22b, 22c 22d) for interacting with the laser beams for the purpose of providing reference end points from which to track (X, Y) movement of the implement (14), and to provide information regarding the position of the radiation relative to the writing surface. See col. 4, lines 43-49 and Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to further modify Ackley’s modified symbology reader (50) system to include Wilson’s use of calibration strips (22a, 22b, 22c, 22d) as shown in Fig. 1. One would have been motivated in view of the suggestion in Wilson that the calibration strips are functionally equivalent to the desired calibrator. The use of calibration strips helps function field responsive graphic data acquisition system (10) as a taught by Wilson et al.

5. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in Ehrhart et al, Yukihiro and in further view of Teufel et al. (USPN 6243503).

Regarding claim 9, Ackley as modified does not teach the “movement of data” defined as indicative of the sensing device’s movement relative to the region. Teufel on the other hand teaches a motion detector unit (202) for recording the given position of the data acquisition device (200) relative to the image plane (20) and photodiodes (229, 230) intended for detecting

the movement the data acquisition device. See col. 10, lines 13-19, 64-67, col. 11, lines 1-4, Fig. 17, (202), Fig 18B and Fig. 19(A-B).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ackley's modified method of decoding data collection symbols to further modify by adapting Teufel's motion detector (202) along with the use of photodiodes (229, 300). One would have been motivated in view of the suggestion in Teufel that the motion detector with photodiodes serve the same purpose and can be equivalently used to obtain the desired sensing device's movement and position relative to the surface. The use of motion detector and photodiodes helps function data acquisition device more effectively as taught by Teufel et al.

Regarding claim 10, Teufel teaches the process in which recognition and translation of handwritten information into electrically readable information takes place. See col. 11, lines 60-67 and col. 12, lines 1-2. Teufel discloses photodiodes (229, 229') on the one hand, and photodiodes (229', 229' ") on the other each detecting a signal from the line of alphanumerical characters.

Regarding claims 11-12, Teufel teaches that as the data acquisition device (200) moves parallel with a marked surface, a pattern of signals is produced in the diode array. Teufel further indicates that such a pattern along with suitable data processing means can be used to determine the direction and the speed of the motion of the reading device. It would have been obvious the same concept can be uses to determine the acceleration of the device.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art is cited for further reference.

U.S. Pat. No. 6,377,249 to Mumford

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulsalam whose telephone number is (571) 272-7685. The examiner can normally be reached on Monday through Friday from 9:00A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7685. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas Abdulsalam

Examiner

Art Unit 267⁷A

June 17, 2005


XIAO WU
PRIMARY EXAMINER